\*AMEDDC&S Reg 351-19

## DEPARTMENT OF THE ARMY

# U.S. Army Medical Department Center and School

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## Schools

## TESTING PROCEDURES AND POLICIES

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<sup>\*</sup>This regulation supersedes AMEDDC&S Reg 351-19, 2 Apr 93.

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## CHAPTER 1. PURPOSE AND POLICIES

- 1-1. **PURPOSE**. This regulation provides policy and general procedural guidance and responsibilities pertaining to the student assessment program for instruction for which the U.S. Army Medical Department Center and School (AMEDDC&S) is proponent.
- 1-2. **REFERENCES.** Required and related publications are listed in Appendix A. Terms and their definitions are listed at Appendix B.
- 1-3. **APPLICABILITY.** This regulation applies to all teaching and development components of the AMEDDC&S. The proponent for each AMEDDC&S course will develop and maintain a Student Evaluation Plan (SEP), approved by the Dean of the respective school.
- 1-4. SCOPE. This regulation describes the process for designing, developing, implementing, validating, and evaluating the AMEDDC&S testing program and the SEP. This regulation is based upon guidance provided in Army Regulation (AR) 351-1; U.S. Army Training and Doctrine Command (TRADOC) Regulations 350-xx (draft), 350-6, 351-10, 351-17; TRADOC Pamphlet (Pam) 350-30, Phase II; and Academy of Health Sciences (AHS) Reg 351-10.
- 1-5. **EXCEPTION TO POLICY.** Given the diversity of AMEDD courses, certain detailed standards may not be applicable in all cases. Graduate programs (those which grant degrees) may follow the established testing policies and procedures of affiliated colleges/universities. Courses which are required to follow civilian examination and certification programs may follow the testing policies of the affiliated program. Other exceptions, must be justified, documented, and approved by the respective school Dean. The SEP will include affiliated school requirements, all Army-specific student evaluation requirements, and the student appeal process IAW AMEDDC&S Reg 351-12.
- 1-6. RESPONSIBILITIES.
- a. Commandant/Dean, Academy of Health Sciences (AHS).

- (1) Assist the Commanding General, AMEDDC&S, in executing the training mission of U.S. Army Medical Command.
- (2) Has the overall staff responsibility for training/ testing programs.
- b. Commandant/Dean, AHS; Dean, U.S. Army Medical Equipment and Optical School (USAMEOS); and Dean, U.S. Army School of Aviation Medicine (USASAM).
  - 1) Chair SEP Review Committee meetings
- (2) Approve/disapprove all SEPs
- (3) Approve/disapprove all requests for exception to policy.
- (4) Manage academic records activities through the local Academic Support Office.
- c. Commandant, AMEDD Noncommissioned Officers Academy
- (1) Assists the Commanding General, AMEDDC&S, in executing the AMEDD Basic Noncommissioned Officer Course (BNCOC) and the AMEDD Advanced Noncommissioned Officer Course (ANCOC).
- (2) Ensures that the NCO Academy courses meet accreditation standards.
- (3) Approves/disapproves generic BNCOC and ANCOC SEPs

- d. Evaluation and Standardization Branch (ESB), Department of Academic Support (DAS).
- (1) Performs systematic random evaluations of the testing program to include test items, tests, test validation, documentation, and administration to determine if procedures are IAW AMEDDC&S policy. An ESB Testing Checklist will be used for the evaluation. (See Appendixes C, D, and E).
- (2) Provides guidance and assistance to developers of SEPs
- (3) Provides a representative to serve on SEP Review Committee
- (4) Maintains copies of all approved SEPs
- (5) Provides feedback from internal and external evaluations to schools and appropriate teaching departments and Brigade Commanders as appropriate.
- (6) Develops and recommends actions to improve the resident testing, administrative grading, and evaluation process.
  - 7 Serves as the proponent for testing regulations and policies.
- e. Course Directors.
- (1) Design, develop, validate, and implement test items, tests, and SEPs in consonance with departmental training developers/Instructional Systems Specialists (ISSs).

NOTE: The tests for the Common Leader Training portion of BNCOC and ANCOC are provided by the U.S. Army Sergeants Major Academy.

- (2) Brief students on the information and policies in the respective course SEP during each course orientation/in-processing to include the assignment of counselors, types, frequency, and documentation process for each counseling session. Distribution of SEPs to students will be accomplished IAW current school Dean's policy. The course director/class advisor may require that students sign a statement that they have read and understand the SEP requirements. Course directors/class advisors must ensure that a copy of the SEP is posted in an area that is readily accessible to students.
- (3) Ensure departmental Standing Operating Procedures (SOPs) describing student probation, relief/recycle, counseling procedures, and appeals process are developed and followed.
- (4) Review and sign SEPs for proponent integrated courses provided as individual annexes in BNCOC and ANCOC generic SEPs.
- (5) Maintain student records IAW AR 25-400-2.
- (6) Ensure all test items, tests, and SEPs are current.
- (7) Ensure all personnel involved in the design, development, and validation of the testing process complete training in AMEDDC&S testing policies and procedures presented by Staff and Faculty Development Branch. Clerical personnel and other designated administrative personnel are exempt from the training requirement.
- (8) Establish a departmental quality control mechanism to assure test items and tests are reviewed and validated IAW the Systems Approach to Training (SAT) process.
- (9) Ensure there is a documented annual review of all tests to confirm test item validity.

Secure all test items and tests IAW school policy

Provide subject-matter expert support to training developers

(for test design, development, and validation) and to ESB for internal test evaluations and audits.

- (12) Forward a copy of all approved SEPs to the ESB for retention in the repository.
- (13) Conduct SEP Review Committee meetings, as required. Approval Boards require representatives from the office of the school Dean ESB, and the training department.
- (14) Provide a departmental ISS to serve on Dean's SEP Approval Board
- (15) Report end-of-course examination scores/grades or other ratings to the Chief, Academic Records Branch not later than two full working days prior to scheduled graduation.

NOTE: In two-phased courses, any unreported Phase I grades must be received by the Academic Records Branch on the day of Phase I termination. Phase II sites will forward final grades to the respective teaching division, which will forward them to Academic Records not later than close of business one working day after the last day of class.

- (16) Report end-of-course examination scores/grades or other ratings to the Chief, Academic Records Branch.
- (17) Identify Distinguished Honor Graduate, Honor Graduates, students eligible for the Commandant's list, and other student awards as applicable.
- f. Training Development Integration Office (TDIO)
- (1) Establishes quality control procedures to ensure test development process and product integrity.

- (2) Reviews all SEPs
- (3) Provides guidance and assistance to developers of testing products and SEPs.

Serves on SEP Review Committees.

- g. Instructors/Subject Matter Experts.
- (1) Provide subject-matter expert support to training developers (for test design, development, and validation) and to ESB for internal test evaluations and audits.

Review all testing products and SEPs.

Administer the testing program IAW regulatory guidelines.

- h. Staff and Faculty Development Branch
- (1) Coordinates the conduct of courses to prepare training developers to develop SEPs, test items, and tests IAW AMEDDC&S policies and procedures.
- (2) Coordinates the conduct of courses to prepare instructors to develop SEPs, and to conduct, score, secure, critique, record, and report tests IAW AMEDDC&S policies and procedures.
- i. Chief, Academic Records Branch, DAS.
- (1) Coordinates with registrars of civilian institutions for the award of academic credit for AMEDD proponent courses.

(2) Provides input to SEP Boards for courses affiliated with colleges and universities or which are aligned with a national board or certification requirement.

# CHAPTER 2. EVALUATION PROCEDURE

EXAMINATION PROCESS.

a. Testing is the process that assesses individual or unit competency. Purposes of evaluation include the following:

Monitor student progress

Check effectiveness of instruction

Check effectiveness of instructional material

Determine proficiency level of students.

Provide practice in skill mastery.

Rank students and provide incentives for student achievement.

b. All course objectives are subject to testing. Course directors will administer a testing program which, as a minimum, samples learning objectives to determine what a student has learned.

#### 2-2. ASSESSMENT/MEASUREMENT METHODOLOGY

The testing method used to assess students' mastery of an objective must be criterion referenced and based on the objective in the LP.

- a. Hands-on performance-oriented training and testing is the preferred method of training and testing and should be used as much as possible.
- (1) Performance tests require students to actually do (perform) a task, given an applicable scenario. Students must perform specific behaviors to the established criteria for each task in order to pass the examination.
- (2) Performance test checklists are used to document student performance, to test learning, and to verify that students have achieved the objective.
- b. Written tests may be used. Situational open-book/ reference, written tests which require students to extract data and apply knowledge to answer specific problems are recommended. Written tests are used throughout course work to measure student learning and to determine student understanding of class objectives.
- (1) Types of written tests:
- (a) Closed book: require students to recall words or phrases, define terms, select or match responses when given lists, and/or discuss pertinent concepts.
- (b) Open book: require students to apply the knowledge/information they have learned.
- 2-3. ASSESSMENT/MEASUREMENT PROCEDURES
- a. Measuring Student Achievement. Two separate methods of measurement may be used to assess student achievement. They are criterion-referenced testing and norm-referenced testing. Either

- (1) Tests normally will not be administered on the same day as the delivery of instruction on the tested material. However, given the diversity of AMEDD courses, testing on the same day as the delivery of instruction may be considered appropriate in some instances. These exceptions must be indicated in the SEP.
- (2) Examinations should be constructed to permit separate grading of key subsections whenever possible. Separate grading of key subsections is important if college credit may be awarded for those subsections by an affiliated academic institution. Grading by subsections also helps identify potential weaknesses in the instructional program. Examinations will be based on a sampling of lesson objectives; not all objectives must be tested.
- (3) The allotment of points for specific areas of the course should reflect the relative weighted importance of the objectives being tested. The weighted importance is determined by the Course Director.
- (4) Examinations will be scheduled and conducted according to the amount of material covered, the amount of time needed to test the objectives adequately, and the type of objectives (cognitive, psychomotor, affective) tested.
- (5) Identical versions of written examinations will be administered in such a manner as to minimize the opportunity for students to pass test questions/answers to each other.
- (6) If absent from an examination/evaluation, a student will be evaluated according to a predetermined course of action which is specified in the SEP. In some cases where the student's absence is unauthorized, the course director is not required to afford the student an opportunity to be tested. The rules governing whether or not makeup tests will be given and any possible adverse consequences of missing a test, will be precisely stated in the SEP. Guidelines for the implementation of these rules can be found in AMEDDC&S Reg 351-12.
- (7) For courses subdivided for academic undergraduate and/or graduate credit only, the course directors will submit to the Chief, Academic Records Section, the following items prior to the beginning of each iteration of the course and as changes occur:

The number of examinations to be given in the course.

The number of academic points for each examination.

- (8) The security of all examination material is the responsibility of the course director.
- q Evaluation of Personal Factors
- (1) Effective job performance is related to an individual's skill level, cognitive style, and need for achievement, growth, and interpersonal relations.
- (2) The specific contribution(s) of these personal characteristics to overall job performance is often expressed as motivation, interest, needs, and expectations of/toward job roles.
- (3) In courses where specific observable personal factors are considered integral to effective job performance, the responsible course director will specify what personal characteristics will be evaluated.
- (4) The inclusion of personal factors will be part of the overall evaluation scheme only when they are directly related to satisfactory job performance and when a rating system for measuring these factors has been devised.
- h. Counseling Procedures. The SEP will specifically describe counseling responsibilities and procedures to include the assignment of counselors, types, frequency, and documentation process for each counseling session IAW AR 635-200 and AHS Reg 531-18.
- i. Reteach/Retest.
- (1 When a student fails a test, she/he is eligible to be retaught

and retested as specified in the SEP IAW AR 351-1, and TRADOC Regs 351-10 and 351-17.

- (2) Reteach/retest is considered academic time, but will NOT be scheduled when the student(s) involved would normally be scheduled for classroom instruction IAW AHS Reg 351-1.
- (3) Retesting will normally not occur on the same day as the original test was administered. No more than one retest of the same material should occur on the same day. The course director may allow same-day reteach/retest IAW predetermined guidelines stated in the SEP. The number of tests a student can fail before recommendation for relief is made will also be stated in the SEP.
- (4) When retested, a student may receive no more than the minimum passing score for that examination; in most cases, a 70 percent of possible points is allotted. This policy precludes students from taking unfair advantage of their peer group by scoring high on a retest and having that score count for ranking purposes. Course directors may specify that recycled students may score no better than the minimum passing score for modules they retake as part of the recycle. The policy will be stated in the SEP.
- (5) Reteach/retest must cover all objectives on which minimum standards of performance were not met initially. In some situations, it is feasible to retest only one area of a test; however, in other situations, student competence can only be measured by having the student repeat his/her performance on several integrated areas.
- (6) Reteach and retest will be conducted IAW with AMEDDC&S Reg 351-12. Any student earning less than the established standard in the SEP will be retaught and retested one time on critical tasks failed.
- (7) Variance from the reteach/retest procedures will be included in the course SEP which requires approval of the school Dean prior to implementation.

# j. Relief/Recycle

- (1 The relief/recycle process is conducted IAW AMEDDC&S Reg 351-
- (2) The decision to recommend the relief of a student is based on the perceived lack of potential for successful completion of the course and the inability to perform effectively within the MOS.

- (3) When the Class Advisor recommends a student for relief from the course, a Notification of Recommendation for Relief for Academic Reasons (DA Form 4856) is prepared in triplicate for signature of the Course Director.
- (4) Students who fail to successfully accomplish a critical objective and subsequent reteach/retest are NOT automatically recycled/relieved. The AMEDDC&S Reg 351-12 states the provisions and procedures for student recycling. The Commander, AMEDDC&S, has delegated authority to approve recommendations for relief or recycle of students to the Commandant/Dean, AHS, and to the Commander/Dean, USAMEOS, and USASAM. The procedures will be conducted IAW AMEDDC&S Reg 351-12. Relief and reentry of NCOs from NCO Academy courses are IAW AR 351-1, chapter 5-30.
- k. Grading Procedures. Grading procedures will be specified in the SEPs.
- (1) Grades or scores may be posted provided the student is identified by a preassigned student number. Students may NOT be identified by name or Social Security Number. Rosters of student names with grades or scores will NOT be posted on bulletin boards or publicly published. Personnel having access to individual grades or scores will make them available only to those who have an official need for the information.
- (2) In certain courses, no numerical grade need be considered--only a pass-fail decision is appropriate. In other courses, a final numerical score/grade may be needed to determine award recipients (AHS Reg 351-10), for academic evaluation report completion (AR 623-1), or for the award of grades by civilian affiliated institutions.
- (3) The award of a pass or fail grade may be made without identifying additional differences in student performance. A consequence of utilizing a strictly pass-fail system is a lack of differentiation in graduate proficiency above the minimum criteria required to achieve a "GO" decision. If such a differentiation is necessary, factors in addition to critical objectives may be included in the grading process and must be specified in the SEP. Acceptable grading procedure options are as follows:

- (a) The award of 70 percent of the total course points (example: 700 points based on a 1,000 point system). Additional points may be awarded based on objective performance.
- (b) Other methods of determining final numerical grades for successful completion of critical objectives may be developed but must be approved by the department/branch/section responsible for course development in coordination with ESB and the school Dean. These methods must also be delineated in the SEP.
- (c) The procedure to be used for rounding up/down of grades will be determined by the course director. The rounding up/down procedure which is selected must be applied consistently (i.e., if a 69.8 is rounded up to 70, an 89.8 must be rounded up to a 90).
- (d) New/revised grade point plans will be effective only for a starting class and will not affect classes already in session. Once a class has received the first period of test instruction, the grade point value of test instruments will NOT be changed.
- 4) Determination of Letter Grades.
- (a) Determining grades for graduate or undergraduate credit is the responsibility of the course director, subject to the guidelines established by the affiliated civilian institution. Special care must be taken to ensure the components of each academic course are evaluated separately and that the final course "average" is NOT applied across the board to separate courses.

NOTE: Examples of grading methodologies are available in the ESB Training Requirements Analysis System (TRAS) Repository.

(b) Grading plans for award of academic credit (i.e., for courses which are affiliated with colleges and universities or which are aligned with a national board or certification requirement, etc.) will be incorporated into the SEP.

2-4. **DOCUMENTATION/AUDIT TRAIL.** Each training department/branch responsible for the development, administration, and revision of the test/examination will maintain a master file for each examination/test. The file will include all related correspondence, test item analysis results, reliability and validity data, feedback, and any other actions.

## 2-5. EXAMINATION SECURITY.

- a. Student examinations must be protected from compromise. To reduce the likelihood of a compromise occurring, all unclassified exams will be secured and handled IAW each school's published policy.
- b. At a minimum, computerized test banks will be accredited at the Unclassified Sensitive 2 (US2) level IAW AR 300-19.
- c. Test version numbers will NOT be annotated on student tests to preclude compromise of the test.
- d. All examination materials will be accounted for before and after each test. Old examination materials will be disposed of in a manner that precludes the possibility of test compromise (e.g., discarded examinations will be destroyed by shredding or burning).
- e. Copies of examination materials will NOT be made available to students except during scheduled examination periods or supervised critiques.
- f. Student answer sheets should be scored in such a way as to preclude students changing answers during the post-test critique
- g. Handling, transportation, or distribution of examination material by other than specifically authorized personnel is

prohibited.

- h. Student answer sheets will be maintained until students graduate.
- i. Instructors will NOT divulge the specific content of any test.

### 2-6. EXAMINATION ADMINISTRATION

- a. Examinations will be administered at the time and place designated in the training schedule. Adequate testing time should be allotted in the Program of Instruction (POI) and programmed into the training schedule.
- b. A lesson plan which details instructor and student duties before, during, and after the administration of each test must be written and followed.
- c. All students will be tested under the same conditions. These conditions should make it easier, NOT harder, to take the test.
- d. Examinations will be administered IAW the course SEP
- e. Qualified personnel should be available and assigned to assist with the examination if necessary.
- f. The instructor(s)/examiner(s)/proctor(s) will continuously monitor the group being tested in as inconspicuous a manner as possible.

- g. Examples of cheating or perceptions of cheating will be described in the SEP. Consequences of cheating will also be explained in the SEP.
- h. If cheating occurs, evidence of cheating must be obtained and the offender must be removed from the testing area as quietly as possible. Evidence of cheating must be documented and the offender must be reapprised of subsequent punitive procedures as detailed in the SEP.

## POST EXAMINATION CRITIQUE

- a. Instructor Contact Hours (ICH) for post examination critiques are accounted for IAW AHS Reg 351-1.
- b. Post examination critiques will be conducted as soon as possible (normally within two working days) following completion of the exam.

## CHAPTER 3. STUDENT EVALUATION PLAN

PURPOSE.

- a. The purpose of the Student Evaluation Plan (SEP) is to provide an outline of procedures/policies which delineate the responsibilities of students enrolled in courses which are within purview of the AMEDDC&S.
- b. All courses of resident instruction, regardless of length, under the auspices of the AMEDDC&S must have an approved SEP. Given the diversity of AMEDD courses, testing requirements may not be applicable in all courses (e.g., conferences/seminars). However, each course will have an SEP which apprises students/ participants of their responsibilities for successful course completion.

NOTE: The SEPs for BNCOC and ANCOC integrated courses will address MOS-specific course completion requirements; each MOS-specific SEP will be incorporated (as an individual annex) into the general BNCOC and ANCOC SEP.

- c. The SEP will be explained to students during course orientation/in-processing and will apprise the student of his/her responsibilities during the conduct of the course.
- d. Testing procedures for multiphased training must be stipulated in the course SEP.

#### 3-2. RESPONSIBILITY.

- a. The Course Director is responsible for developing, staffing, maintaining, and updating the SEP, as well as for monitoring testing. Course directors can make interim changes in the SEP, but these changes must be staffed through ESB, AMEDDC&S, and approved by the appropriate school Dean prior to implementation.
- b. All courses are required to have an approved SEP on file in the ESB Training Requirements Analysis System (TRAS) Repository.
- c. At the start of every course, whether or not students are tested, students will be informed of the general course expectations, procedures, and policies. This information will be stated in the SEP and will be explained to each student during the orientation/administrative process.
- d. At the start of every course in which students are tested, students will be informed of the general course procedures and academic evaluation policies. The student orientation/in-processing should include appropriate information in the following areas: course objectives, grading system, academic probation, relief, recycle, student appeal procedures, reteach/ retest sessions, AERs, awards, university affiliations, and any standing operating procedures (SOP) that, if violated, could result in relief from the course.

- e. The SEP should also include a flowchart which depicts the relief/recycle process to enable the students to visualize and follow the relief/recycle procedures.
- f. A copy of the approved SEP will be posted in an area that is accessible for student referral at all times.
- g. Student Evaluation Plans will be reviewed annually during the curriculum committee meeting in preparation for the SEP Review Board meeting.
- h. The course director will submit a request through the appropriate school Dean to schedule an annual SEP Review Board. The SEP Review Board will normally consist of the school Dean or designated representative (chairperson), TDIO representative, course director, ESB representative, branch chief, class advisor, teaching department representative, and Instructional Systems Specialist. Final approval authority for each SEP will be the school Dean.

#### APPENDIX A

#### REFERENCES

- 1. AR 12-15, Education and Training of Foreign Personnel by the  ${\rm U.S.}$
- 2 AR 25-400-2, The Modern Army Record Keeping System (MARKS)
- 3. AR 350-41, Training in Units.
- 4. AR 351-1, Individual Military Education and Training.
- 5 AR 380-19, Information Systems Security
- 6. AR 600-9, The Army Weight Control Program.
- 7. AR 611-201, Enlisted Career Management Fields and Military Occupational Specialties

- 8. AR 621-5, Army Continuing Education.
- 9. AR 623-1, Personnel Education-Academic Evaluation Reporting System.
- 10. AR 635-200, Enlisted Ranks Personnel
- 11. TRADOC Reg 350-2, Development, Implementation, and Evaluation of Individual Training.
- 12. TRADOC Reg 350-4, The TRADOC Training Effectiveness Analysis (TEA) System.
- 13. TRADOC Reg 350-6, Initial Entry Training IET) Policies and Administration.

TRADOC Reg 350-7, A Systems Approach to Training.

- 15. TRADOC Reg 350-15, Training Evaluation and Quality Assurance Program.
- 16. TRADOC Reg 351-10, Guidelines for the Development of Enlisted Training.
- 17. TRADOC Reg 351-17, Noncommissioned Officer Training in TRADOC Noncommissioned Officer Academies.
- 18 TRADOC Pam 18-2, TRADOC Educational DATA Systems (TREDS).

TRADOC Pam 25-33, Army Training Glossary

- 20. TRADOC Pam 350-30, Interservice Procedures for Instructional Systems Development, Phase II, Design.
- 21. Health Services Command Supplement to AR 380-19, Information Systems Security.
- 22 AHS Reg 351-1, Training Requirements Analysis System.

AHS Reg 351-5, Training Development.

- 24. AHS Reg 351-10, Student Academic Awards.
- 25. AHS Reg 351-11, Individual Meeting Education and Training.
- 26. AMEDDC&S Reg 351-12, Enrollment, Relief, Recycle, and Administrative Disposition of Student Personnel.

AHS Reg 351-13, The Evaluation Process at the AHS

28. AHS Reg 351-18, Class Advisors and Academic Counselors.

#### APPENDIX B

#### TERMS AND DEFINITIONS

The following terms are based on AHS Reg 351-5 and AMEDDC&S Reg 351-12, TRADOC Regs 350-7, 351-17, and TRADOC Pam 350-30. These terms and definitions may not have been used in the body of this regulation; they are defined here for standardization and for clarification of usage.

- 1. Action verb. A verb that conveys action and reflects the type of performance that is to occur (e.g., list, state, discuss, draw, measure, calculate, etc.) Action verbs must be observable, measurable, reliable, and verifiable.
- 2. Affective domain. A classification of training objectives which focus on the development of attitudes, beliefs, behaviors, and values. May also refer to achievement levels associated with the development of training attitudes, beliefs, behaviors, and values.
- 3. Affective learning. Learning that is concerned with the acquisition of desired attitudes or values by the learner such as order and discipline required within the military.
- 4. After action review. A professional discussion which focuses on the training objectives of on-going or completed training. It is a review of training activity that allows soldiers to discover for themselves what happened and why.
- 5. Answer key. A document that shows the answer to each test question and the test standard for each learning objective.

- 6. Army unit test. A formal external evaluation conducted at the discretion of the commander to provide a "snapshot" of unit proficiency in selected missions.
- 7. Audit trail. A systematic documentation of actions taken that lead to or support decisions about training. Maintenance of a complete audit trail enables training modification and revision in a logical, coordinated, and systematic manner. Also refers to a methodical listing of events, rationale, data sources, and justification for changes to an original concept or plan.
- 8. Baseline data. Valid and reliable information about the current level of performance of the student population. This data can be used to confirm the need to develop new instruction or to assess differences between student performance before (at baseline) and after instruction.
- 9. Block of instruction. In resident training, a group of related lessons, usually finishing with a test for record.
- 10. Chaining. A training technique that uses or transforms a learned response into the stimulus for the next desired response which then becomes the stimulus for the next response and so on to the final desired response. Constructing a test that requires the student to use an answer from an already completed test question in order to arrive at the answer of a different test question. This situation should normally be avoided in testing because missing the initial question can result in missing all other chained questions.
- 11. Checklist. A job aid which lists the elements of a learning objective in the sequence of execution. The soldier places a check beside each element as it is accomplished in accordance with the learning objective standard(s).
- 12. Cognitive learning. A domain of learning that is concerned with knowledge and the various mental activities and processes by which the learner acquires knowledge and mental skills.

- 13. Commandant's List. Students who are in the top 20% (highest point totals) of the number of graduating students in a specific class, including Distinguished Honor Graduate and Honor Graduates; successfully passed the APFT for record on the first try; have not scored below 70% on an initial exam; have not had any disciplinary action taken or pending while assigned/attached in a student status; have not had any adverse counseling statements on record concerning improper behavior or inappropriate conduct.
- 14. Competency. The level of skill and knowledge required to perform a given task to standard under required condition(s).
- 15. Competency based training. Training which is organized around an agreed upon set of competencies and which provides learning experiences designed to lead to the attainment of these competencies.
- 16. Condition. The situation or environment in which a soldier or unit is expected to perform a task (e.g., tools, reference material, weather, environment, restrictions, etc.). Conditions include any pertinent influences upon the task performance such as environment, equipment, manuals, assistance, or supervision required.
- 17. Constructed response. An answer requiring recall or completion as opposed to recognition (e.g., drawing a diagram).
- 18. Criterion. The standard by which something is measured. In test validation, it is the standard against which test instruments are correlated to indicate the accuracy with which they predict human performance in some specific area. In evaluation, it is the measure used to determine the adequacy of a product, process, or behavior.
- 19. Criterion-referenced grading. A way of grading students in relation to a predetermined standard (go or no-go). The standard parallels, as closely as possible, on-the-job requirements.
- 20. Criterion-referenced instruction. The instruction which is critical to the accomplishment of a defined task.

- 21. Criterion-Referenced Test (CRT). A test that establishes whether or not a soldier or unit performs a task to a predetermined, well-defined standard. Performance is measured against a prescribed criterion or set of criteria. A CRT determines if the proficiency level required for a student to continue successfully on to the next block of instruction has been met.
- 22. Critical missions. Collective missions identified by analysis as vital to the performance of an immediate, direct, specific combat mission or the survival of a unit on the battlefield.
- 23. Critical task. A collective or individual task selected for training determined to be essential to mission and duty performance or survival in wartime (combat or survival on the battlefield) or peacetime. Critical tasks are trained in the training base, the unit, or both and are listed in an approved task list.
- 24. Critical objective. Objective that must be performed to a predetermined standard in order for students to complete the course of instruction. Critical objectives must test the performance expected of the student as the result of instruction.
- 25. Cuing. Describes a deficiency in a test question where the correct answer can be found or implied from the information found elsewhere in the test.
- 26. Cut-off score. Minimum score for achievement of a specific goal or the minimum passing score.
- 27. Diagnostic test. An evaluative instrument used to measure performance against a criterion. Test administered at the start of or early in the course, to identify strengths and weaknesses in critical areas and to allow sufficient time for remediation if necessary.
- 28. Difficulty index. Measures test item difficulty; indicates the

percentage of people in some specified group, such as students of a given age, grade, or ability level, that answer a test item correctly. It is calculated by dividing the number of students who answered the item correctly by the number of students who took the test.

- 29. Discrimination Index. In test item analysis, a measure of the ability of a test item to differentiate between the level of achievement of two groups (usually the upper and lower scoring groups) within a homogeneous group:
- a. Test the homogeneous group (e.g., 100 students) on a task which has been taught to the group (a percentage of the group will answer the test item correctly and another percentage of the group will answer the test item incorrectly).
- b. Rank test papers in order by score from high to low.
- c. Divide the group in half based on the scores.
- d. Count the number of students in each group (the group with the higher number of correct responses is the "high" group; the group with the lower number of correct responses is the "low" group; e.g., 50 high 50 low).
- e. Tally the total number of correct responses in each group on the test item (e.g., 40 correct responses in the high group; 10 correct responses in the low group).
- f. Divide the number answering the item correctly by the total number of students in the group; (e.g., 40 50 = 80% high group; 10 50 = 20% low group).
- g. Subtract the percentage of students in the low group who answered the item correctly from the percentage of students in the high group who answered the item correctly: e.g., 80% 20% = 60%; 60% = the discrimination index.